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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/544,780 | 08/08/2005 | Harald Keller | 275181US0PCT | 5352 |
| 22850 | 7590 | 10/29/2008 | | |
| OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | EXAMINER SCHIRO, RYAN RAYMOND | |
| | | | ART UNIT 1792 | PAPER NUMBER |
| | | | NOTIFICATION DATE 10/29/2008 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

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|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/544,780 | Applicant(s) KELLER ET AL. | |
| | Examiner RYAN SCHIRO | Art Unit 1792 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10 and 12-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 and 12-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/08/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-8, 10 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waeber et al. (US 2005/0066448) in view of Kim et al. ("Preparation of ethylene-modified latex using ethylene-acrylic acid resin").

4. Waeber teaches a method for applying a finishing layer to a textile support material (abstract). Waeber also teaches a textile material that is coated with the finishing layer, as required by claim 7 (claims 19-22). The finishing layer is an aqueous mixture (0036) and can include crosslinked natural or synthetic hydroxyl, carbonyl, amino or thiol group containing polymers onto the textile material (0027). Hydrophobic silica particles, which are inorganic solids, having an average particle size of 5-100 nm are also set into the finishing layer, as

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required by claims 1, 2, 4, 6, 8, 10 and 12 (0034). The hydrophilic silica particles are present in the liquor in a fraction of 1.5-5 g/L (Examples 1-8). Emulsifying of the finishing components is effected using a rapidly rotating stirrer or high-pressure mixing systems (0025). A primer layer is formed on the textile surface before the water repellent layer is deposited for means of bonding the water repellent layer to the textile material, as required by claim 3 (0036). Examples 6-8 of Waeber teach that isopropanol is included in the composition as a solvent, as required by claim 13 (0049, 0053, 0056). Examples 1-8 taught in Waeber (0036-0058) have drying periods and temperatures around the same time periods and temperatures as the drying described in Applicant's specification. Therefore, it is inherent that the water-fraction is substantially low enough in Waeber to fall within or close to the 0-15% range since the drying periods and temperatures are the same, required by claims 14 and 15.

5. Waeber does not teach that an emulsifier is specifically included in the aqueous finishing liquor or that the solids are present in a 5.5-7 g/L amount.

6. Kim is drawn to the use of an ethylene-acrylic acid resin (EAA) as an emulsifier with organic polymers, such as polystyrene or polymethacrylate, as required by claims 1, 8, 10 and 12 (Introduction).

7. It would have been obvious to a person ordinarily skilled in the art at the time of the invention to combine the teachings of Waeber, an organic polymer-solid material aqueous solution for finishing textile materials which is emulsified, with an emulsifier comprised of EAA that is used with organic polymers, as taught by Kim to make an organic polymer-solid material aqueous solution with an EAA emulsifier. One would have been motivated to combine the composition of Waeber with the emulsifier of Kim because addition of the EAA would save time

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in preparing the coating composition of Waeber by eliminating mechanical stirring or mixing to emulsify the composition. Also, one would have been motivated to combine the teachings of Waeber and Kim because it is stated in Kim that the water permeability of the polymer films decreased as the concentration of ethylene-acrylic acid increase, which is a further object of the teachings of Waeber.

8. It would have been obvious to a person ordinarily skilled in the art at the time of the invention that the solid could be in the aqueous composition in a fraction of 5.5-7 g/L, as required by claims 1, 5, 8 and 10. It is well settled in the determination of the optimum values for such as the solid fraction in the aqueous liquor is within the skill of one practicing in the art. *In re Boesch*, 205 USPQ 215 (CCPA 1980).

Conclusion

Claims 1-8, 10 and 12-15 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Schiro whose telephone number is 571-270-5345. The examiner can normally be reached on Monday-Friday from 8:30 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Schiro
Art unit 1792

/Michael Barr/

Supervisory Patent Examiner, Art Unit 1792